AMD13\_181 4/11/07

## Jessie White

From: Jim Scholl [jim\_scholl@dot.state.ak.us]
Sent: Tuesday, April 10, 2007 8:04 AM

To: 'Jessie White'

Subject: FW: STIP comments/follow-up

Attachments: details.txt; ATT00017.txt; stipcom407.doc







details.txt (364 B) ATT00017.txt (2 stipcom407.doc (2 KB) MB)

Please log this in and the attachment as a comment. Thanks!

----Original Message-----

From: Ron King [mailto:ron\_king@dot.state.ak.us]

Sent: Monday, April 09, 2007 4:01 PM

To: 'James W Scholl'

Subject: FW: STIP comments/follow-up

Ron King
Capital Programs Manager
Department of Transportation
Division of Program Development
3132 Channel Drive
P.O. Box 112500
Juneau, AK 99811-2500

Phone: (907) 465-2065 Fax: (907) 465-6984

Email: ron king@dot.state.ak.us

----Original Message----

From: Lois Epstein [mailto:lois@aktransportation.org]

Sent: Monday, April 09, 2007 10:39 AM

To: ron\_king@dot.state.ak.us Cc: DOT\_STIP@dot.state.ak.us Subject: STIP comments/follow-up

Hi Ron. I submitted my comments to DOT\_STIP@dot.state.ak.us late on Thursday night (see below), then logged out, and wasn't on my computer again until last night. As I mentioned during our in-person discussion, I met with Commissioner von Scheben during Friday morning in the Mat-Su and then drove and ferried to Juneau, arriving last night. As a result, I didn't know on Friday that the DOT computer system had rejected ATPP's comments, and I couldn't resend them on Friday as I was on the road by then.

Please accept the attached comments for your review (which I tried to send in a timely fashion!). Thanks, and please let me know whether my request will be honored.

Best, Lois

Lois N. Epstein, P.E.
Director
Alaska Transportation Priorities Project
308 G St., Suite 221
Anchorage, AK 99501
ph: 907 929-9372
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lois@aktransportation.org
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Promoting sensible transportation systems in Alaska

----Original Message-----

From: Internet Mail Delivery [mailto:postmaster@jnumail1.state.ak.us]

Sent: Thursday, April 05, 2007 11:35 PM

To: lois@aktransportation.org

Subject: Delivery Notification: Delivery has failed

This report relates to a message you sent with the following header fields:

Return-path: <lois@aktransportation.org>

Received: from reprocess-daemon.jnumail1.state.ak.us by

jnumail1.state.ak.us

(iPlanet Messaging Server 5.2 HotFix 2.14 (built Aug 8 2006))

id <0JG200C7SFPOS9@jnumail1.state.ak.us>

(original mail from lois@aktransportation.org); Thu,

5 Apr 2007 23:34:37 -0800 (AKDT)

Received: from ancmail1.state.ak.us (ancmail1.state.ak.us [146.63.92.66])

by inumail1.state.ak.us

(iPlanet Messaging Server 5.2 HotFix 2.14 (built Aug 8 2006))

with ESMTP id <0JG200ASMFPLIV@jnumail1.state.ak.us> for

dot\_stip@dot.state.ak.us; Thu, 5 Apr 2007 23:34:36 -0800 (AKDT)

Received: from smtpa.state.ak.us (localhost [127.0.0.1])

by ancmail1.state.ak.us

(iPlanet Messaging Server 5.2 HotFix 2.14 (built Aug 8 2006))

with ESMTP id <0JG200IOGFPI8Q@ancmail1.state.ak.us> for

dot\_stip@dot.state.ak.us; Thu, 05 Apr 2007 23:34:34 -0800 (AKDT)

Received: from psmtp.com (exprod6mx165.postini.com [64.18.1.219])

by smtpa.state.ak.us

(iPlanet Messaging Server 5.2 HotFix 2.14 (built Aug 8 2006))

with SMTP id <0JG20006WFONIH@smtpa.state.ak.us> for

dot stip@dot.state.ak.us;

Thu, 05 Apr 2007 23:34:27 -0800 (AKDT)

Received: from source ([63.134.207.56]) by exprod6mx165.postini.com

([64.18.5.10]) with SMTP; Fri, 06 Apr 2007 02:34:00 -0500 (CDT)

Received: from maila49.webcontrolcenter.com [216.119.106.58] by

gwa11.webcontrolcenter.com with SMTP; Fri, 06 Apr 2007 00:32:31 -0700

Received: from 216-67-13-174-cdsl-rb1.nwc.acsalaska.net [216.67.13.174] by maila49.webcontrolcenter.com with SMTP; Fri, 06 Apr 2007 00:29:08 -0700

Date: Thu, 05 Apr 2007 23:29:17 -0800

From: Lois Epstein <lois@aktransportation.org>

Subject: Comments on the 2006-2009 STIP Draft, Amendment 13 (attached)

To: DOT\_STIP@dot.state.ak.us

Message-id: <000001c7781d\$4a3fd330\$6e01a8c0@ATPP>

MIME-version: 1.0

X-MIMEOLE: Produced By Microsoft MimeOLE V6.00.2900.3028

X-Mailer: Microsoft Office Outlook 11

Content-type: multipart/mixed;

boundary="---- NextPart 000 0001 01C777DA.3C1C9330"

Thread-index: Acd4HErteo+k6wfwR2STi3PgqAtZ2A==

X-pstn-levels: (S:99.90000/99.90000)

X-pstn-settings: 1 (0.1500:0.1500) qt3 qt2 qt1

X-pstn-addresses: from <lois@aktransportation.org> [142/10]

Your message cannot be delivered to the following recipients:

Recipient address: dot stip@dot.state.ak.us

Reason: list size limit exceeded: dot\_stip@dot.state.ak.us



### Promoting sensible transportation systems in Alaska

April 5, 2007

Via email: DOT STIP@dot.state.ak.us

ADOT Statewide Planning Office – Division of Program Development

To Whom This Concerns:

Thank you very much for considering the following comments on the 2006-2009 Statewide Transportation Improvement Program (STIP) Draft, Amendment 13 (Major), from the Alaska Transportation Priorities Project (ATPP). ATPP works with conservation organizations, communities, unions, landowners, engineers, cargo shippers, tribes, and travelers to promote sensible transportation systems and policies in Alaska.

In general, ATPP supports safe, economic, well-maintained, and environmentally-appropriate transportation systems which benefit Alaskans. Along these lines, ATPP believes the state's foremost transportation priority should be to "fix it first" which includes spending adequately on safety, next the state should fund popular and widely-desired projects (like the proposed Glenn/Seward Highway connection in Anchorage and Parks Highway upgrades to allow cargo shipments year-round), and only last should the state spend money on costly and controversial transportation projects through or to undeveloped areas.

The author of these comments, Lois Epstein, has directed the Alaska Transportation Priorities Project since January 2007 and is a Professional Engineer for over 15 years, licensed in both Alaska and Maryland.

### **State Mega-Projects**

ATPP opposes including the three state mega-projects – the Juneau Road/Ferry project, the Knik Arm Bridge, and the Gravina Bridge – in this STIP Draft document. These three mega-projects, listed as costing \$320 million, \$548 million (for Phase I, with Phase II approximately the same amount though not listed in the STIP Draft), and \$398 million, 1 respectively, total over \$1.2 billion. These figures undoubtedly are low due to expected construction cost increases, 2 recently-completed technical studies not yet having had their

<sup>&</sup>lt;sup>1</sup> \$108 million more than listed in the STIP Draft, personal communication with Ron King, Capital Programs Manager, Department of Program Development, ADOT & PF, March 30, 2007.

<sup>&</sup>lt;sup>2</sup> As much as 30%-100%, recently according to Jeff Ottesen, Director, Department of Program Development, ADOT & PF, at the Southeast Conference Mid-Session Summit, March 29, 2007.

cost implications incorporated into the STIP Draft, and ADOT & PF's structural incentives which allow staff to underestimate project costs to draw projects to particular regions.

Though ATPP does not have the exact figures, it is our understanding that these three mega-projects (and some of their access roads) have extremely high costs per lane-mile compared to other projects in the state and Outside Alaska. Additionally, at least two of these three projects are extremely complicated technically: the Juneau Road/Ferry project, due to the many geotechnical hazards identified by Golder Associates<sup>3</sup> which are summarized in Attachment 1 with some of these hazards and the steep fjord location shown in Figure 1, as well as having marine mammal haulouts nearby, and; the Knik Arm Bridge because of the area's tides (among the highest in the nation), silt loading, waterborne ice floes, and sensitive estuarine biology.

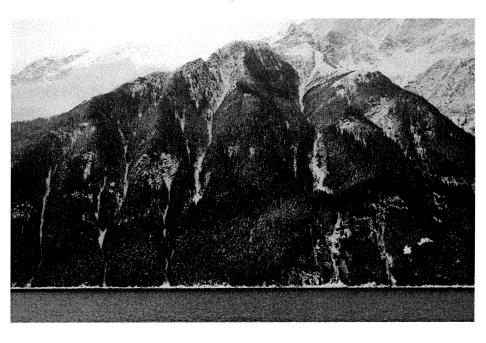


Figure 1

Stretch of the Proposed Juneau Road/Ferry Project, south of the Katzehin River.

As a result of the high costs of these projects, ADOT & PF should consider the mega-projects' cost-effectiveness in comparison to other projects across the state, particularly since numerous other projects may have to be delayed, scaled back, or cancelled should one or more of these mega-projects go forward.

<sup>&</sup>lt;sup>3</sup> Lynn Canal Highway, Phase I, Zone 4 Geotechnical Investigation, Final Report, Golder Associates, December 2006,

http://www.dot.state.ak.us/stwdplng/projectinfo/ser/juneau\_access/assets/GEOTECH2006/Zone\_4\_Phase\_I Geotech Investigation FULL.pdf

Given the comparatively high costs of these mega-projects compared to other Alaska transportation projects, it's critical that the state have a good handle on each of the mega-project's costs. ATPP requests that each of these mega-projects – with first priority given to the Juneau Road/Ferry mega-project whose construction is most imminent – undergo an independent validation of its cost estimates. Such an exercise, similar to Washington state's Cost Estimate Validation Process, will provide a credible basis for governmental decision-making, would increase public confidence in state government, and could save the state a significant quantity of transportation funds over the long-run.

### **Declining Funding in the Future**

As ADOT & PF staff know, the federal Highway Trust Fund is in decline and a cut of 25% in federal transportation funding to states may occur as early as 2009. This dramatic funding decrease means that many transportation projects that the state has started or plans to start before 2009 may not finish in a reasonable timeframe, and many projects that have been postponed due to near-term funding of the mega-projects may not be built. As a result, ATPP urges ADOT & PF to reevaluate projects in the STIP Draft with this substantial funding decrease in mind, and to reconsider whether the mega-projects should proceed at this time without assured transportation funding statewide for the next decade.

### **Process Concerns**

When requesting public comments on the STIP and its amendments, it is critical for the public to know which projects have been cancelled, scaled back, or delayed in each successive version of the STIP. ATPP requests that ADOT & PF prepare such an analysis and post it on the Internet prior to the public comment period for major, future changes to the STIP. Without such a document, members of the public must individually analyze the changes from the last version of the STIP, an extremely inefficient and time-consuming process.

WSDOT is committed to constant cost evaluation as a means to better manage projects and respond to public skepticism and concern about project estimates and actual costs.

WSDOT has been tackling this issue since February 2002, when we developed the Cost Estimate Validation Process - CEVP®, a groundbreaking effort to identify and quantify potential risks that can impact a project's budget or schedule. In 2003, we updated several project estimates to maintain project cost integrity.

<sup>&</sup>lt;sup>4</sup> See http://www.wsdot.wa.gov/Projects/ProjectMgmt/RiskAssessment/CEVP.htm which states:

<sup>&</sup>lt;sup>5</sup> Which ATPP believes is not now the case at ADOT & PF because of the highly politicized decision-making and resultant support of these three mega-projects by the Murkowski Administration.

<sup>&</sup>lt;sup>6</sup> Jeff Ottesen, Director, Department of Program Development, ADOT & PF, at the Southeast Conference Mid-Session Summit, March 29, 2007.

Additionally, while ATPP understands the need for ADOT & PF to finalize the STIP Draft promptly to meet the demands of the 2007 summer construction season, ATPP organization notes for the record that we have had inadequate time to review, analyze, and comment on this document.

Thank you very much for your attention to these comments and concerns.

Sincerely,

Lois N. Epstein, P.E. Director

### Attachment 1

# Analysis of the Lynn Canal Highway Phase I, Zone 4 Geotechnical Investigation Undertaken by Golder Associates (December 2006)

# Lois N. Epstein, P.E. (civil engineer) Director, Alaska Transportation Priorities Project February 2007

**Summary:** Golder Associates conducted Phase 1 of a three-part geotechnical investigation of 22.2 miles of proposed road route south of the Katzehin River to Independence Creek (20 miles north of Echo Cove, which is approx. 40 miles north of Juneau) on the east side of Lynn Canal. Due to the difficult and remote terrain, Golder Associates could not access all areas. Golder Associates performed its field work during the summer of 2006.

The investigation shows extensive technical difficulties and hazards associated with road construction and operation over this portion of the proposed route. It indicates greatly increased road construction costs over previous estimates¹ due to: 1) design and construction changes to protect against rockfalls, debris flows, and avalanche-related problems, and 2) the presence of numerous large boulders which will be difficult to remove and which complicate road bed construction. The investigation shows that this portion of the route will require numerous non-standard road construction features.

### **Examples of Costly Road Design and Construction Needs**

- To avoid rockfalls during construction and operation where the proposed road passes through somewhat unstable rock (or talus) fields, <u>engineering (i.e., retaining walls) or constructed solutions (e.g., removing the talus above)</u> will be required.
- To avoid damage from rockfalls and debris flows, some proposed road segments likely will require <u>tunnels</u>.
- Pre-design documents anticipate a road cut angle that is too steep based on the investigation's findings on bedrock characteristics. A lower road cut angle, more appropriate for the bedrock found during the investigation, means more material needs to be removed and disposed of.
- Breaking up large rocks and moving them cannot be done with conventional earthmoving equipment and requires <u>blasting</u>.
- To prevent damage and road shut-downs from snow avalanches, some proposed road segments might require <u>snow sheds</u> (roof-like coverings).
- The proposed road segment near the Gran Point sea lion haulout <u>does not have a clear</u> <u>design solution at this time</u>.

over

Page 2
ATPP Analysis of the Lynn Canal Highway Geotechnical Investigation

### **Background on Hazards Along the Proposed Route**

- 1) Rockfalls Rockfalls are the "most common" geologic hazard along the proposed route. (p. 34) Over the 22.2 miles of the proposed route, there are 52 catalogued rockfall hazard areas. (p. 34)
- 2) **Rock slides** Rock slides are larger in volume than rockfalls and create rock (or talus) fields. (p. 34) *Over the proposed route, there are two catalogued rockslide hazards*. (p. 34)
- 3) **Debris flow deposits** Debris flow deposits represent a mixture of sand-to-boulder-sized rocks, often combined with tree debris, which flow down gullies during periods of high run-off such as during heavy precipitation, snowmelt, or rain-on-snow events. *Over the proposed route, there are 42 catalogued debris flow hazards.* (p. 34)
- 4) **Boulders** "Extremely large boulders and talus are widespread along east Lynn Canal and *may present unique challenges to excavation, road construction and hazard management...*Removal of mega-boulders [i.e., over 10 ft. in diameter] may present challenges to mechanical excavation by earth moving equipment and may require blasting. Large voids (up to 6 ft. wide and 15 ft. deep) are common...which may complicate fill and compaction for road grading." (emphasis added, p. 16)
- 5) **Landslides** Over the proposed route, there are three catalogued landslide hazards. (p. 34)
- 6) Snow avalanches The investigation focused primarily on geologic hazards, so complete identification and assessment of snow avalanche hazards were outside the investigation's scope. (p. 19)

#### **Endnote**

<sup>1</sup>The *Record of Decision* for the January 2006 Environmental Impact Statement states that "[m]ost aspects of the [proposed] highway involve standard construction" (*Record of Decision, Juneau Access Improvements Project*, April 2006, p. A-30) The *Record of Decision* also states that the road's cost will be \$1.86 million per lane mile, "within the cited USGAO range of \$1 to \$8 million per lane mile." (*Ibid.*) The numerous geotechnical hazards found by Golder Associates show that non-standard, complex design and construction strategies will be essential in many locations along this portion of the proposed route, thus greatly raising costs – probably to the upper end of national highway construction costs (i.e., a cost increase over a factor of four to approximately \$8 million per lane mile for this portion of the proposed road).